

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A process for preparing C(O)F₂ which comprises photooxidizing a reaction mixture comprising CHClF₂ or CHF₃ with oxygen and wherein at least some of the radiation is in the range from 280 nm to about 750 nm and if CHClF₂ is used, the content in the reaction mixture of CHClF₂ is at least 5 mol%.
2. (Previously presented) The process according to Claim 1, wherein the irradiation is undertaken in the absence of chlorine and the incident light have wavelengths including < 280 nm, or in that the irradiation is undertaken in the presence of elemental chlorine with light of a wavelength of \geq 280 nm, in which case not more than 0.50 mol of elemental chlorine is present in the reaction mixture per mole of CHClF₂ or CHF₃.
3. (Previously presented) The process according to Claim 1, wherein 0.05 to 0.20 mol of elemental chlorine is present per mole of CHClF₂ or CHF₃.
4. (Previously presented) The process according to Claim 1, wherein the irradiation is carried out at a temperature of 20 to 300°C.
5. (Previously presented) The process according to Claim 1, wherein the irradiation is carried out at a pressure of 1 to 11 bar (abs.).
6. (Previously presented) The process according to Claim 1, wherein the reactants are present in gaseous form.
7. (Previously presented) The process according to Claim 1, wherein the reaction is carried out continuously.
8. (Previously presented) The process according to Claim 7, wherein the average residence time in the reactor is between 0.1 and 3 minutes.
9. (Previously presented) The process according to Claim 1, wherein CHClF₂ is used as the starting compound.

10. (Previously presented) The process according to Claim 1, wherein the irradiation is carried out at a temperature of 30 to 300°C.

11. (Previously presented) The process according to Claim 1, wherein the irradiation is carried out at a temperature of 50 to 90°C.

12. (Previously presented) A process for preparing C(O)F₂ which comprises photooxidizing CHClF₂ or CHF₃ with oxygen using

(1) a irradiation lamp which emits only UV light of a wavelength greater than ≥ 280 nm,

(2) a fluorescent tube or

(3) a high pressure mercury lamp.

13. (Previously presented) The process as claimed in claim 12, wherein said irradiation lamp is used.

14. (Previously presented) The process as claimed in claim 12, wherein said fluorescent tube is used.

15. (Previously presented) The process as claimed in claim 12, wherein said mercury lamp is used.

16. (Previously presented) The process according to Claim 12, wherein 0.05 to 0.20 mol of elemental chlorine is present per mole of CHClF₂ or CHF₃.

17. (Previously presented) Process according to Claim 13, wherein the irradiation is carried out at a temperature of 20 to 300°C and at a pressure of 1 to 11 bar (abs.).

18. (Previously presented) The process according to Claim 12, wherein the reactants are present in gaseous form.

19. (Original) The process according to Claim 12, wherein the reaction is carried out continuously.

20. (Previously presented) The process according to Claim 12, wherein CHClF_2 is used as the starting compound.

21. (Previously presented) The process according to claim 20, wherein CHClF_2 is reacted with oxygen in the presence of elemental chlorine wherein an irradiation lamp is used which emits only light of a wavelength above or at 280 nm.

22. (Previously presented) The process according to claim 20, wherein CHClF_2 is reacted with oxygen in the presence of elemental chlorine wherein frequencies below 280 nm a masked out of the light emitted.